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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) 16 -09- 2004

Applicant's or agent's file reference
P435PC00

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/SE2004/000664

International filing date (day/month/year)
29.04.2004

Priority date (day/month/year)
30.04.2003

International Patent Classification (IPC) or both national classification and IPC
F03D 3/02, F03D 3/04

Applicant
Oldin, Karin et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further opinions, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/SE2004/000664

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
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International application No.
PCT/SE2004/000664

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-4, 6, 7, 9, 10</u>	YES
	Claims	<u>5, 8</u>	NO
Inventive step (IS)	Claims	<u></u>	YES
	Claims	<u>1-10</u>	NO
Industrial applicability (IA)	Claims	<u>1-10</u>	YES
	Claims	<u></u>	NO

2. Citations and explanations:

Documents cited in the International Search Report:

D1: FR, A, 1086320
D2: US, A, 4070131
D3: FR, A1, 2588317
D4: DE, A1, 4122667
D5: EP, A2, 0097635

Each of documents D1-D4 disclose a wind power plant of cyclone type comprising a base, a tower above the base and being open at the top and provided with a side inlet for the wind to generate a cyclone in the tower. The tower is rotated during operation such that the wind inlet of the tower is maintained towards the wind. The wind power plant further comprises a substantially horizontal turbine having inlets through the base and outlet to the centre of the cyclone in the tower and being connected for driving a generator. The tower of the wind power plants described in D1-D3 are formed such that they have an elliptical shape in the horizontal plane.

Document D5 discloses a device for producing heat energy and simultaneously auto-regulating the speed of a windmill or wind-turbine, which comprises a water brake mounted on the rotating shaft of the windmill or the wind-turbine.

The method defined in claim 1 differs from the subject matter discloses in D1-D4 in that the tower is maintained in a leaning position to the vertical in a direction parallel to the wind. This characteristic must be

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International application No.

PCT/SE2004/000664

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: BOX V

considered unclear, as it is not defined why the tower should be maintained in a leaning position. The purpose of the method defined by claim 1, must be interpreted as being to obtain a tower with an elliptical shape in the horizontal plane, as defined in claim 5 and 6. However, this is not defined in claim 1 nor does claim 1 define the shape of the tower in a vertical position. Additionally, it must be considered a mere choice for a person skilled in the art to lean a wind power plant known from any of D1-D4 in order to influence the horizontal shape of the tower without the exercise of inventive skill. Considering these circumstances, claim 1 can not be considered to differ in any essential way from the subject matter disclosed in D1-D4, and does therefore not involve an inventive step.

The wind power plant according to claims 5 and 8 does not differ from the wind power plants disclosed in D1-D3 and does therefore lack in novelty.

The subject matter of claims 2-4, 6, 7 and 9 must be considered obvious to a person skilled in the art, especially in light of documents D1-D4, and does therefore not involve an inventive step.

Arranging a rotor shaft in a wind power plant for driving a water brake for heating water, is per se known from e.g. D5. The person skilled in the art would therefore regard it as a normal option to include this feature in a wind power plant known from any of D1-D3 in order to obtain a wind power plant according to claim 10. Claim 10 does therefore not involve an inventive step.

WRITTEN OPINION OF THE
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International application No.

PCT/SE2004/000664

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawing or on the question whether the claim are fully supported by the description, are made:

Claim 1 can not be considered to be clear and concise since it is not defined why the tower should be maintained in a leaning position nor is the shape of the tower in a vertical position defined. Claim 1 does therefore not fulfil PCT Article 6